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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/871,154 | 05/31/2001 | Howard A. Heller | 2479.2091-000. | 7439 |

21005 7590 10/22/2004

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EXAMINER

CONTEE, JOY KIMBERLY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2686

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,154

Applicant(s)

HELLER ET AL.

Examiner

Joy K Contee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 16, 2004 have been fully considered but they are not persuasive.

Applicant argues that the handset in Laurila (US. Patent No. 6,591,116) "is not capable of handling the situation wherein a second mode may have enhanced capabilities that are not known a priori to the handset." Hence, Applicant concludes that Laurila does not teach or suggest associating a database with a data communication system containing data indicative of the operating mode capability of the wireless subsystem within the wireless subsystem (see details of argument on pages 12-13).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "capable of handling the situation wherein a second mode may have enhanced capabilities that are not known a priori to the handset") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicant's conclusion that Laurila does not teach or suggest associating a database with a data communication system containing data indicative of the operating mode capability of the wireless subsystem, Examiner submits that Laurila teaches that SIM and USIM applications may have different capabilities and that systems 32 or 32' (i.e., reads on Applicant's subsystems) (see Fig. 3) are enabled to

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accommodate the different capabilities (e.g., GSM and UMTS). Hence the mobile equipment 10 (i.e., reads on Applicant's handset switchable between two modes of operation) can roam between two networks which may require different authentications (e.g., UMTS authentication does not work in GSM) (see col. 5, line 60 to col. 6, line 11). Since the SIM/USIM or UICC stores information not only relevant to the mobile equipment itself but also includes data indicative of various applications, algorithms and network type (e.g., GSM or UMTS), thus the network sends authentication requests to mobile based on SIM/USIM or UICC capabilities, (see Fig. 3, col. 6, lines 47-53 and col. 7, lines 37-49). Examiner contends that the claim limitations are met in Laurila in that the networks are able to discern the capabilities of the mobile equipment as well.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 8-10, 12-15 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Laurila et al. (Laurila), U. S. Patent No. 6,591,116.

Regarding claim 1, Laurila discloses in a data communication system including a wireless subsystem for the transmission of data packets between a server and a wireless handset having a voice/data capability selectable between first and second

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operating modes, a method of selecting the operating mode of the handset after wireless communication is established between the handset and the subsystem, which comprises the steps of:

associating, with the system, a data base (i.e., inherent to SIM/USIM) containing data indicative of the operating mode capability of the subsystem (col. 3, lines 16-21);

transmitting query messages on the system (i.e., reads on SIM/USIM system) from the handset to the data base to retrieve such capability data (col. 6, lines 37-51); and

operating the handset in the second mode (i.e., reads on "support for UMTS authentication) if the retrieved capability data indicates that the subsystem (e.g., network 2, see Fig. 2) is capable of operation in the second mode (col. 6, lines 47-53).

Regarding claims 2 and 5, Laurila is applied just as in claim 1 and additionally discloses in a data communication system (see Fig. 2) for transmitting data packets between a server and a wireless handset having a voice/data capability selectable between first and second operating modes, the system comprising, in combination, first and second wireless subsystems (wireless base station) coupled to the server, the first subsystem (and first base station) being operable in the first mode, the handset being initially in wireless communication with the first subsystem (first base station) in the first mode, a method of selecting the operating mode of the handset in connection with a handoff of the handset from the first subsystem (first base station) to the second subsystem (second base station), which comprises the steps of:

transmitting query messages on the system from the handset to the data base (inherent to SIM/USIM) after execution of the handoff to retrieve such capability data (col. 5, lines 64 to col. 6, line 40).

Regarding claim 3, Laurila discloses a method as defined in claim 2, in which the query messages contain information identifying the subsystem (i.e., reads on whether GSM or UMTS) to which the handset is then connected (col. 6, lines 47-67) .

Regarding claim 4, Laurila discloses a method as defined in claim 3, in which the query messages further contain information inherently identifying the current specific latitude-longitude location (i.e., inherent to Location Update message) of the handset (col. 6, lines 28-31).

Regarding claim 6, Laurila discloses in a data communication system for transmitting data packets between a wireless handset having a voice/data capability selectable between first and second operating modes and a server designated as a first Internet destination port for the handset, the system comprising, in combination, first and second wireless subsystems coupled to the server through the Internet, the first subsystem being operable in the first mode, the handset being initially in wireless communication with the first subsystem in the first mode, a method of selecting the operating mode of the handset in connection with a handoff of the handset from the first subsystem to the second subsystem, which comprises the steps of:

associating, with the system, a data base (SIM/USIM) containing data indicative of the operating mode capability of the second subsystem (i.e., reads on network 2) (col. 3, lines 16-21);

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transmitting query messages on the system from the handset to the data base after execution of the handoff to retrieve such capability data (col. 6, lines 28-46) ; and switching the handset into the second mode if the retrieved capability data indicates that the second subsystem is capable of operation in the second mode (e.g., UMTS authentication) (col. 6, lines 57-67).

Regarding claim 8, Laurila discloses a method as defined in claim 6, in which the data base further contains configuration data (i.e., reads on user profile configuration applications) useful for efficient radio communication between the handset and the second subsystem in the second mode (col. 6, lines 47-53).

Regarding claim 9, Laurila discloses in a data communication system for transmitting data packets between a server and wireless handset having a voice/data capability selectable between first and second operating modes, the system comprising, in combination, a first wireless subsystem including a first base station coupled to the server through the Internet and operable in the first mode, and a second wireless subsystem including second and third base stations coupled to the server through the Internet, the second base station being operable in the first mode, the handset being initially in wireless communication with the first base station in the first mode, a method of selecting the operating mode of the handset in connection with a handoff of the handset from the first base station to the second base station, which comprises the steps of:

associating, with the system, a data base (SIM/USIM) containing data indicative of the operating mode capability of the third base station (col. 3, lines 16-21);

transmitting query messages on the system from the handset to the data base over the second base station after the handoff to retrieve such capability data (col. 6, lines 16-46);

switching the handset into the second mode if the retrieved capability data indicates that the inherent third base (i.e., reads on the fact that other networks may be present, for example "network C", see col. 3, lines 58-60 and col. 7, line 59 to col. 8, line 28) station is capable of operation in the second mode (col. 6, lines 47-67); and

establishing wireless communication between the handset and the inherent third base station (i.e., reads on the fact that other networks may be present, for example "network C", see col. 3, lines 58-60 and col. 7, line 59 to col. 8, line 28) when the operating mode of the handset is switched (col. 6, lines 47-53).

Regarding claim 10, Laurila discloses in a data communication system for transmitting data packets between a wireless handset having a voice/data capability selectable between first and second operating modes and a server designated as a first Internet destination port for the handset, the system comprising, in combination, a first wireless subsystem including a first base station coupled to the server through the Internet and operable in the first mode, and a second wireless subsystem including second and third base stations coupled to the server through the Internet, the second base station being operable in the first mode, the handset being initially in wireless communication with the first base station in the first mode, a method of selecting the operating mode of the handset in connection with a handoff of the handset from the first base station to the second base station, which comprises the steps of:

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associating, with the system, a data base (SIM/USIM) containing data indicative of the operating mode capability of the third base station (col. 3, lines 16-21);

transmitting query messages on the system from the handset to the data base over the second base station after the handoff to retrieve such capability data (col. 6, lines 16-46);

switching the handset into the second mode if the retrieved capability data indicates that the inherent third base (i.e., reads on the fact that other networks may be present, for example "network C", see col. 3, lines 58-60 and col. 7, line 59 to col. 8, line 28) station is capable of operation in the second mode (col. 6, lines 47-67); and

establishing wireless communication between the handset and the inherent third base station (i.e., reads on the fact that other networks may be present, for example "network C", see col. 3, lines 58-60 and col. 7, line 59 to col. 8, line 28) when the operating mode of the handset is switched (col. 6, lines 47-53).

Regarding claim 12, Laurila discloses in a wireless handset operable in a selectable one of first and second voice/data modes for exchanging data packets with a remote machine through a data communication system, the system comprising, in combination, a first wireless subsystem coupled to the remote machine and operable in the first mode, a second wireless subsystem coupled to the remote machine, and a data base associated with the system and containing data indicative of the operating mode capability of the second subsystem, the handset being initially in radio communication with the first subsystem in the first mode, the handset being switchable into radio

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communication with the second subsystem in response to the execution of a handoff of the handset from the first subsystem to the second subsystem:

means responsive to the execution of the handoff for generating a capability data request to be transmitted to the data base through the first subsystem (i.e., reads on VLR of network 2 sending a query through HLR of network 1) to retrieve the capability data (col. 6, lines 15-36); and

means responsive to the retrieved capability data for switching the handset from the first mode to the second mode if the retrieved capability data indicates that the second subsystem (i.e., reads on VLR or network 2, e.g., UMTS authentication) is capable of operation in the second mode (see col. 6, lines 47-67).

Regarding claim 13, Laurila discloses in a data communication system for transmitting data packets between a server and a wireless handset operable in a selectable one of first and second voice/data modes, the system comprising, in combination, a first wireless subsystem coupled to the server and operable in the first mode, and a second wireless subsystem coupled to the server, the handset being initially in radio communication with the first subsystem in the first mode, the handset being switchable into radio communication with the second subsystem in response to the execution of a handoff of the handset from the first subsystem to the second subsystem:

a data base (i.e., reads on SIM/USIM) associated with the system and containing data indicative of the operating mode capability of the second subsystem (col. 3, lines 16-21);

means associated with the handset and operative in the event of a handoff of the handset from the first subsystem (i.e., reads on network 1) to the second subsystem (i.e., reads on network 2) for interrogating (requesting) the data base (SIM/USIM) over the system to retrieve the capability data (col. 6, lines 16-53); and

means associated with the handset and responsive to the retrieved capability data for operating the handset in the second mode (e.g., UMTS authentication) after such handoff if the retrieved capability data indicates that the second subsystem is capable of operation in the second mode (col. 6, lines 47-67).

Regarding claim 14, Laurila discloses in a data communication system for the transmission of data packets between a server and a wireless handset having a voice/data capability selectable between first and second modes, the system comprising a base station coupled to the server and in radio communication with the wireless handset:

a data base (SIM/USIM) associated with the system and containing data indicative of the operating mode capability of the base station (col. 3, lines 16-21);

means associated with the handset for transmitting query messages on the system from the handset to the data base to retrieve such capability data; and means responsive to the retrieved capability data for operating the handset in the second mode if the retrieved capability data indicates that the base station is capable of operation in the second mode (col. 6, lines 24-67).

Regarding claim 15, Laurila discloses in a data communication system for transmitting data packets between a server and a wireless handset operable in a

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selectable one of first and second voice/data modes, the system comprising first and second base stations coupled to the server, the first base station being operable in the first mode, the handset being in initial wireless communication with the first base station and switchable into wireless communication with the second base station when handed off to the second base station:

a data base associated with the system and containing data indicative of the operating mode capability of the second base station (col. 3, lines 16-21);

means associated with the handset and operative in the event of a handoff of the handset from the first base station to the second base station for interrogating (i.e., reads on requests) the data base over the system to retrieve the capability data (col. 6, lines 37-40) ; and

means associated with the handset and responsive to the retrieved capability data for operating the handset in the second mode after such handoff if the retrieved capability data indicates that the second base station is capable of operation in the second mode (col. 6, lines 47-67).

Regarding claim 19, Laurila discloses in a data communication system for transmitting data packets between a wireless handset having a voice/data capability selectable between first and second operating modes and a server designated as a first Internet destination port for the handset, the system comprising, in combination, a first wireless subsystem including a first base station coupled to the server through the Internet and operable in the first mode, and a second wireless subsystem including second and third base stations coupled to the server through the Internet, the second

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base station being operable in the first mode, the handset being initially in wireless communication with the first base station in the first mode and switchable into wireless communication with the second base station when handed off from the first base station to the second base station:

a data base associated with the system and containing data indicative of the operating mode capability of inherent the third base station (col. 3, lines 16-21 and lines 58-59 and col. 7, lines 59-60);

means associated with the handset and operative after execution of a handoff of the handset from the first base station to the second base station for interrogating the data base over the second base station to retrieve the capability data (col. 6, lines 16-46);

means associated with the handset and responsive to the retrieved capability data for operating the handset in the second mode if the retrieved capability data indicates that the third base station is capable of operation in the second mode (col. 6, lines 47-67); and

means coupled to the operating means and effective when the handset is operated in the second mode for establishing wireless communication between the handset and the inherent third base station (col. 6, lines 46-66 and col. 7, lines 59-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laurila, in view of Kannas et al. (Kannas), U.S. Patent No. 6,683,853.

Regarding claims 7, 11 and 20, Laurila discloses a method as defined in claims 6, 10 and 19, respectively, but fails to explicitly disclose in which the associating step comprises designating the data base as a second Internet destination port for the handset.

In a similar field of endeavor, Kannas discloses comprises designating the data base as a second Internet destination port for the handset.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Laurila to include an Internet server as a n Internet designation port for the purpose of providing an end-to-end transfer of user data between the terminal of the user equipment and a data network point-of-presence, as taught by Kannas.

6. Claims 16-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laurila, in view of Henry et al. (Henry), U.S. Patent No. 6,157,845.

Regarding claim 16, Laurila discloses in a data communication system for transmitting data packets between a first server and a wireless handset operable in a selectable one of first and second voice/data modes, the system comprising first and second wireless subsystems coupled to the first server, the first subsystem being operable in the first mode, the handset being in initial wireless communication with the

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first subsystem and switchable into wireless communication with the second subsystem when handed off to the second subsystem:

means associated with the handset and operative in the event of a handoff of the handset from the first subsystem to the second subsystem for interrogating the data base over the system to retrieve the capability data; and means associated with the handset and responsive to the retrieved capability data for operating the handset in the second mode after such handoff if the retrieved capability data indicates that the second subsystem is capable of operation in the second mode (col. 6, lines 16-67).

Laurila fails to explicitly disclose a second server associated with the system; and an inherent data base incorporated in the second server and containing data indicative of the operating mode capability of the second subsystem.

In a similar field of endeavor, Henry discloses a second server associated with the system; and an inherent data base incorporated in the second server and containing data indicative of the operating mode capability of the second subsystem (col. 9, lines 50-65).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify Laurila to include a database within a server (e.g., in or coupled to HLR or VLR) for the purpose of permitting interoperability among service providers and/or networks. Even Laurila suggests that a HLR may store information about SIM/USIM capabilities (col. 6, lines 16-21)

Regarding claim 17, Laurila as modified by Henry discloses a system as defined in claim 16, in which the first and second servers are designated as first and second Internet destination ports, respectively, for the handset (see Henry, col. 6, lines 16-21).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify Laurila to include a database within a server (e.g., in or coupled to HLR or VLR) for the purpose of permitting interoperability among service providers and/or networks. Even Laurila suggests that a HLR may store information about SIM/USIM capabilities (col. 6, lines 16-21)

Regarding claim 18, Laurila as modified by Henry discloses a system as defined in claim 16, in which the data base further contains configuration data useful for efficient radio communication between the handset and the second subsystem in the second mode (see Laurila col. 6, lines 47-53).

Regarding claim 21, Laurila discloses in a data communication system for transmitting data packets between a wireless handset having a voice/data capability selectable between first and second operating modes and a first server designated as a first Internet destination port for the handset, the system comprising, in combination, a first wireless subsystem including a first base station coupled to the first server through the Internet and operable in the first mode, and a second wireless subsystem including second and third base stations coupled to the first server through the Internet, the second base station being operable in the first mode, the handset being initially in wireless communication with the first base station in the first mode and switchable into

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wireless communication with the second base station when handed off from the first base station to the second base station:

means associated with the handset and operative after execution of a handoff of the handset from the first base station to the second base station for interrogating the data base over the second base station to retrieve the capability data (col. 6, lines 23-46);

means associated with the handset and responsive to the retrieved capability data for operating the handset in the second mode if the retrieved capability data indicates that the third base station (e.g., network C) is capable of operation in the second mode (col. 6, lines 46-53 and col. 7, lines 59-67); and

means coupled to the operating means and effective when the handset is operated in the second mode for establishing wireless communication between the handset and the third base station (col. 6, lines 47-67).

Laurila fails to explicitly disclose a second server associated with the system; a data base incorporated in the second server and containing data indicative of the operating mode capability of the third base station..

Henry discloses a second server associated with the system; and an inherent data base incorporated in the second server and containing data indicative of the operating mode capability of the third base station (col. 9, lines 51-65).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify Laurila to include a database within a server (e.g., in or coupled to HLR or VLR) for the purpose of permitting interoperability among service providers and/or

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networks. Even Laurila suggests that a HLR may store information about SIM/USIM capabilities (col. 6, lines 16-21)

Regarding claim 22, Laurila as modified by Henry discloses a system as defined in claim 21, in which the second server is designated as a second Internet destination port for the handset (see Henry, col. 9, lines 51-65).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify Laurila to include a database within a server (e.g., in or coupled to HLR or VLR) for the purpose of permitting interoperability among service providers and/or networks. Even Laurila suggests that a HLR may store information about SIM/USIM capabilities (col. 6, lines 16-21)

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on M (alternating), T & Th, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



October 16, 2004



CHARLES APPIAH
PRIMARY EXAMINER